DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-000389
Date Inspected: 23-Aug-2007

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 800
OSM Departure Time: 1730
Location: Shanghai, China

CWI Name: Yei Yongjun

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☐ Yes	☑ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☐ Yes	☐ No	☑ N/A	**Verified Joint Fit-up:**	☐ Yes	☑ No	☐ N/A
				Approved WPS:	☐ Yes	☑ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: Bend testing/PQR#HP-2007 149-1

Summary of Items Observed:

Caltrans Quality Assurance (QA) Inspector Sherri Brannon arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China to periodically monitor welding and Quality Control (QC) functions. While on site the QA Inspector observed and/or discovered the following.

Side Bends Tests

QA Inspector Brannon randomly observed mechanical testing of side bend test specimens for welder qualification in the am. QA Inspector Brannon randomly observed Moody International Mr. Jiang Weifeng and ABF representative Mr. Kevin Dye visually inspect side bend specimens after testing. Results are as follows:

Seventy Nine (69) Side Bend Test Specimens
Specimen #1001-1&2, Specimen #1002-1&2, Specimen #1004-1&2, Specimen #1005-1&2, Specimen #1008-1&2, Specimen #1009-1&2, Specimen #1011-1&2, Specimen #1012-1&2, Specimen #1016-1&2, Specimen #1101-1&2, Specimen #1103-1&2, Specimen #1104-1&2, Specimen #1105-1&2, Specimen #1108-1&2, Specimen #1111-1&2, Specimen #1118-1&2, Specimen #1119-1&2, Specimen #1126-1&2, Specimen #1127-1&2, Specimen #1130-1&2, Specimen #1133-1&2, Specimen #1136-1&2, Specimen #1140-1&2, Specimen #1144-1&2, Specimen #1145-1&2, Specimen #1146-1&2, Specimen #1147-1&2, Specimen #1148-1&2, Specimen #1151-1&2, Specimen #1152-1&2, Specimen #1153-1&2, Specimen #1156-1&2, Specimen #1201-1&2, Specimen #1202-1&2, Specimen #1206-1&2, Specimen #1208-1&2, Specimen #1216-1&2, Specimen #1222-1&2, Specimen #1229-1&2, Specimen #1232-1&2, Specimen #1234-1&2, Specimen #1235-1&2, Specimen #1238-1&2, Specimen #1239-1&2, Specimen #1240-1&2, Specimen #1241-1&2, Specimen #1243-1&2, Specimen #1247-1&2, Specimen #1248-1&2, Specimen #1250-1&2, Specimen #1251-1&2, Specimen

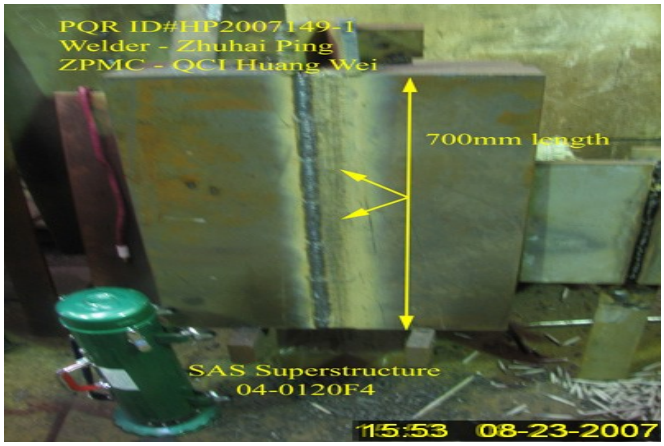
#1255-1&2, Specimen #1259-1&2, Specimen #1262-1&2, Specimen #1269-1&2, Specimen #1270-1&2, Specimen #1271-1&2, Specimen #1272-1&2, Specimen #1275-1&2, Specimen #1276-1&2, Specimen #1278-1&2, Specimen #1279-1&2, Specimen #1280-1&2, Specimen #1281-1&2, Specimen #1282-1&2, Specimen #1290-1&2,Specimen #1292-1&2, Specimen #1294-1&2, Specimen #1296-1&2, Specimen #1298-1&2, Specimen #1299-1&2, Specimen #1300-1&2, Specimen #1302-1&2, Specimen #1305-1&2, Specimen #1309-1&2, Specimen #1310-1&2, Specimen #1313-1&2, Specimen #1314-1&2, Specimen #1315-1&2.

The tests results identified above have been observed and recorded as being compliant with the test requirements as listed within AWS D1.5 (2002). Also, See ZPMC Bending Test Record of Welder Qualification for more detail information report # WT-LX-20070823-1.

PQR ID#HP2007149-1

Later in the shift QA Inspector Brannon periodically observed ZPMC welder Mr. Zhuhai Ping, welding fill passes for Procedure Qualification Record Test (PQR) #HP-2007 149-1. Base metal was designated as A-709 Grade HPS-485W (Heat # 06103565N). Mr. Ping was observed welding in the 3G (vertical), position utilizing a shielded metal arc welding (SMAW) process using a 4.0mm diameter electrode, classification E7018-1, Brand: THJ506Fe-1, manual process. Mr. Ping appeared to be using proper inter-pass cleaning methods by using manual steel wire brush, and manual chisel and hammer. QA Inspector observed preheat and welding parameters measured by the QC Inspector Mr. Ye Yongjun and Bureau Veritas QC Inspector Mr. Hou Jing Yao. QA Inspector Brannon witnessed passes 65 through 70 (layer 22). The QA Inspector performed random verifications of the welding parameters for a total of 6 passes. QA Inspector Brannon found that the welding parameters taken by QC Inspector Mr. Ye Yongjun appeared to be accurate and in accordance with the contract documents. The QA Inspector Brannon performed visual inspection on the PQR# HP-2007 149-1 test coupon after completion weld reinforcement appeared to be in general compliance with the contract documents. The QA Inspector Brannon assigned Caltrans lot # B22-025-07 to this PQR coupon. This Caltrans 6031 report is supported by Caltrans 6032 report for this date.

The following digital photograph illustrates PQR test ID#HP-2007-149-1 after completion.



WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Summary of Conversations:

No relevant conversations on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Brannon,Sherri	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer